

**Listing of Claims:**

Claims 1-12 (cancelled).

13. (previously presented) A method for electroless plating of a semiconductor wafer, comprising the steps of:

providing a plating bath;  
establishing a state of hydrogen saturation in the bath by immersing a metal specimen in the bath;  
immersing the semiconductor wafer in the hydrogen saturated bath.

14. (previously presented) The method of Claim 13, wherein said step of immersing a metal specimen in the bath comprises immersing a metal plate in the bath.

15. (previously presented) The method of Claim 13, wherein the step of immersing a metal specimen in the bath comprises immersing a metal coated semiconductor wafer in the bath.

16. (previously presented) The method of Claim 13, wherein the metal specimen is copper.

17. (previously presented) The method of Claim 13, wherein the step of providing a plating bath comprises providing a nickel plating bath.

18. (previously presented) The method of Claim 13, wherein the semiconductor wafer includes a patterned copper metal layer on one of the surfaces of the wafer.

19. (previously presented) The method of Claim 13, wherein the metal specimen remains in the bath after the step of immersing the semiconductor wafer in the bath.